

LIQUID-JET HEAD, METHOD OF MANUFACTURING THE SAME AND LIQUID-JET APPARATUS

Abstract

A liquid-jet head capable of preventing malfunction attributable to an external environment such as humidity of a piezoelectric element and of achieving miniaturization thereof, a manufacturing method thereof and a liquid-jet apparatus are disclosed. The liquid-jet head including a passage-forming substrate in which a pressure generating chamber communicating with a nozzle orifice ejecting a liquid is defined and a piezoelectric element composed of a lower electrode, a piezoelectric layer and an upper electrode on one surface of the passage-forming substrate with a vibration plate interposed therebetween, wherein the liquid-jet head includes a sealing plate joined to a piezoelectric element side of the passage-forming substrate and having a piezoelectric element holding portion, the sealing plate hermetically sealing a space secured in a region facing to the piezoelectric element to an extent not to hinder a movement thereof, and at least a part of a peripheral portion of the piezoelectric element holding portion of the

sealing plate is joined to the passage-forming substrate via a glass joining layer made of glass. Thus, intrusion of moisture into the piezoelectric element holding portion is prevented.